



## **“Two Postdoctoral positions in modelling and analysis of super resolution imaging data of chromatin structure”** *Centre for Genomic Regulation (CRG)*

### **The Institute**

The Centre for Genomic Regulation (CRG) is an international biomedical research institute of excellence, based in Barcelona, Spain, with more than 400 scientists from 44 countries. The CRG shares principles of an interdisciplinary, motivated and creative scientific team that is supported by high-end and innovative technologies and a flexible and efficient administration.

CRG has been conferred with a badge of ‘HR Excellence in Research’ by the European Commission, in recognition to its progress in implementing the European Charter for Researchers and the Code of Conduct for Recruitment of Researchers, that among others consists of transparent, merit-based recruitment procedures and attractive work-life balance working conditions.

For further information: [www.crg.eu](http://www.crg.eu)

### **The role**

Two postdoctoral positions in super resolution imaging of chromatin function

### **About the team/ lab/ department**

#### **Reprogramming and Regeneration and Biomechanics of Morphogenesis Laboratories**

Pia Cosma’s group is focused on the study of the mechanisms that control somatic cell reprogramming and tissue regeneration. Using super-resolution fluorescence microscopy (stochastic optical reconstruction microscopy; STORM) we have dissected out the nanoscale organization of nucleosome assembly, with high molecular specificity and spatial resolution in a variety of somatic and stem/ reprogrammed cells. We have delineated a novel model of chromatin fiber assembly, and the relationship among the decoded structure and naïve pluripotency (Ricci et al. Cell 2015). More recently we set up powerful imaging approach to visualize genes at nanoscale resolution (Neguembor et al. NAR 2017).

Jérôme Solon’s group is focused on understanding biological control of morphogenesis. The group uses an interdisciplinary approach combining expertise in high-resolution microscopy, image/data processing and analysis and biophysical modelling. The group is developing experimental and analysis methods at multiple scales to understand tissue organization (Saias et al. Dev. Cell. 2015, Czerniak et al. Curr. Biol. 2016), cell shape control (Sumi et al., Dev.Cell. 2018) and nuclear architecture.

### **Whom would we like to hire?**

- You hold a Phd in in physics, mathematics, computer sciences, engineering or related disciplines.
- You have proven experience with data/image analysis, programming and biophysical modeling.
- You are fluent in English





### The Offer

- **Contract duration:** 1 year with the possibility to renew.
- **Estimated annual gross salary:** Salary is commensurate with qualifications and consistent with our pay scales.
- **Target start date:** as soon as possible

We provide a highly stimulating environment with state-of-the-art infrastructures, and unique professional career development opportunities.

We offer and promote a diverse and inclusive environment and welcomes applicants regardless of age, disability, gender, nationality, race, religion or sexual orientation.

The CRG is committed to reconcile a work and family life of its employees and are offering extended vacation period and the possibility to benefit from flexible working hours.

### Application Procedure

All applications must include:

1. A motivation letter addressed to Dr Cosma and Dr.Solon.
2. A complete CV including contact details.
3. Contact details of two referees.

All applications must be addressed to Dr. Cosma and Dr Solon and be submitted online on the CRG Career site - <http://www.crg.eu/en/content/careers/job-opportunities>

**Deadline:** Please submit your application by 15<sup>th</sup> of January, 2019.

